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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,521	10/16/2003	Hyun-kwon Chung	1793.1077	4904

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EXAMINER	J
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PRICE, NATHAN E

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/686,521	Applicant(s) CHUNG ET AL.	
	Examiner Nathan Price	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003 and 17 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/20/2004 and 6/17/2004.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1 – 24 are pending.

Claim Objections

2. Claims 1 – 24 are objected to because of the following informalities: the claims include abbreviations ("AV") without a clear indication of the meaning of the abbreviations. Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/685,694. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the copending application anticipates claim 1 of Application No. 10/686,521.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/685,696. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the copending application anticipates claim 1 of Application No. 10/686,521.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/685,697. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method of the copending application performs the same function as the apparatus.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 10/685,699. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method of claim 5 of the copending application performs the same function as the apparatus of claim 1.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 4 of copending Application No. 10/686,537. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 4 of the copending application anticipates the apparatus.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 19 – 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims recite an apparatus for controlling a buffer, but the apparatus does not appear to include the buffer. It appears that the elements of the apparatus, specifically the buffer manager, can be implemented in software alone, making the claims software, per se. Even though the claim states that the manager is part of an apparatus, it appears that the recited elements of the apparatus can be implemented in software alone. Therefore, the claims are rejected as being directed toward non-statutory subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1 and 23 rejected under 35 U.S.C. 102(e) as being anticipated by Tsumagari et al. (US 2004/0126095 A1).

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10. As to claim 1, Tsumagari et al. (US 2004/0126095 A1) teaches an apparatus for reproducing AV data using a markup document in an interactive mode, comprising:

a buffer which buffers the markup document [¶ 27, 58]; and

a buffer manager which manages the buffer to preload the markup document and outputs buffering state information of the buffer in response to a report signal [¶ 53 and 58].

11. As to claim 23, Tsumagari et al. (US 2004/0126095 A1) teaches an apparatus for recording and/or reproducing AV data using a markup document in an interactive mode, comprising:

an AV buffer which buffers the AV data [¶ 27, 58];

an AV reproduction engine which decodes the AV data [¶ 51];

an ENAV buffer which preloads the markup document to reproduce the AV data in the interactive mode [¶ 27, 58];

an ENAV engine which identifies buffering state information of the markup document and decodes the markup document [¶ 51 – 53].

means for obtaining the markup document [¶ 116].

12. Claims 1 and 23 rejected under 35 U.S.C. 102(e) as being anticipated by Tsumagari et al. (US 2003/0161615 A1).

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13. As to claim 1, Tsumagari et al. (US 2003/0161615 A1) teaches an apparatus for reproducing AV data using a markup document in an interactive mode, comprising:

- a buffer which buffers the markup document [¶ 65, 393 – 396]; and
- a buffer manager which manages the buffer to preload the markup document and outputs buffering state information of the buffer in response to a report signal [¶ 255 and 393 – 396].

14. As to claim 23, Tsumagari et al. (US 2003/0161615 A1) teaches an apparatus for recording and/or reproducing AV data using a markup document in an interactive mode, comprising:

- an AV buffer which buffers the AV data [¶ 65, 393 – 396];
- an AV reproduction engine which decodes the AV data [¶ 255];
- an ENAV buffer which preloads the markup document to reproduce the AV data in the interactive mode [¶ 65, 393 – 396];
- an ENAV engine which identifies buffering state information of the markup document and decodes the markup document [¶ 255]
- means for obtaining the markup document [¶ 86].

15. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

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16. Claims 1 – 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Lamkin et al. (US 2005/0278729 A1; hereinafter Lamkin). Claims 1 – 24 are taught by claims 1 – 24 of Lamkin.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 1 – 14 and 19 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landsman et al. (US 6,466,967 B2; hereinafter Landsman) in view of Silberschatz (Silberschatz, Avi, Peter Galvin and Greg Gagne, "Applied Operating System Concepts," First Edition, John Wiley & Sons, Inc., 2000.).

18. As to claim 1, Landsman teaches an apparatus for reproducing AV data using a markup document in an interactive mode, comprising:

a buffer which buffers the markup document [col. 9 lines 23 – 55; col. 10 lines 5 – 31; col. 26 lines 43 – 49]; and

a buffer manager which manages the buffer to preload the markup document [col. 16 line 56 – col. 17 line 9; col. 26 lines 43 – 49].

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19. Although Landsman fails to specifically state outputting buffering state information, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to output buffering state information of the buffer in response to a report signal because Landsman teaches that the advertisement can not be played until after it is cached [col. 26 lines 43 – 49], motivating one of ordinary skill in the art to provide a way to determine if it is cached. Furthermore, Silberschatz teaches outputting state information of a buffer [page 427 # 6 – 8].

20. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these teachings because Landsman teaches performing I/O in a computer system and Silberschatz teaches the details of servicing I/O requests.

21. As to claim 2, Landsman teaches a content decoder which interprets the markup document and outputs the report signal, wherein the buffer manager informs the content decoder of the buffering state information of the buffer in response to the report signal [col. 15 lines 51 – 67; col. 25 lines 39 – 48; col. 26 lines 20 – 49].

22. As to claim 3, Landsman teaches the content decoder generates the report signal using an API [col. 34 line 66 – col. 35 line 18].

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23. As to claim 4, Landsman teaches the API serves to notify the content decoder of whether preloading of the markup document succeeded, or whether the markup document is still being loaded [col. 26 lines 43 – 49; col. 34 line 66 – col. 35 line 18].

24. Landsman fails to specifically teach indicating that preloading failed. However, Silberschatz teaches providing an error notification for I/O calls [page 422 ¶ 3], which makes it obvious to one of ordinary skill in the art to provide notifications of errors regarding preloading or downloading data.

25. As to claim 5, Landsman fails to specifically teach returning a value based on success, failure or incomplete loading. However, Silberschatz teaches returning values depending on the current state, including success, failure and incomplete [page 422 ¶ 3; page 427 # 6 – 8].

26. As to claim 6, Landsman teaches the content decoder generates the report signal using an API, which includes at least one of a file path and an attribute of the markup document as a parameter [col. 12 lines 15 – 38; col. 34 line 66 – col. 35 line 18].

27. As to claim 7, Landsman teaches the content decoder generates the report signal using an [obj].isCached(URL, resType) API, where the URL is a parameter indicating a file path of the markup document and the resType is a parameter indicating

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an attribute of the markup document [col. 12 lines 15 – 38; col. 26 lines 43 – 49; col. 34 line 66 – col. 35 line 18].

28. As to claim 8, Landsman modified by Silberschatz teaches the buffer manager informs the content decoder of a buffering state of the markup document utilizing an API [Landsman: col. 26 lines 43 – 49; col. 34 line 66 – col. 35 line 18] [Silberschatz: page 427 # 6 – 8].

29. As to claim 9, Landsman teaches a content decoder which interprets the markup document, wherein the buffer manager transfers the markup document from the buffer to the content decoder in response to a reproduce signal [col. 22 lines 46 – 64].

30. As to claim 10, Landsman teaches a content decoder which interprets the markup document, wherein the content decoder outputs a release signal to the buffer manager indicating that the markup document therein brought from the buffer, in response to a reproduce signal, is not in use [col. 32 lines 35 – 45].

31. As to claim 11, Landsman teaches the content decoder outputs the release signal to the buffer manager in response to the markup document no longer being displayed in a screen of a display device [col. 22 lines 46 – 65; col. 32 lines 35 – 45].

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32. As to claim 12, Landsman teaches a content decoder which interprets the markup document, wherein the buffer manager deletes the markup document from the buffer in response to a discard signal output from the content decoder [col. 22 lines 46 – 65; col. 32 lines 35 – 45].

33. As to claim 13, Landsman teaches the content decoder generates the discard signal using a discard API [col. 22 lines 46 – 65; col. 32 lines 35 – 45; col. 34 line 66 – col. 35 line 18].

34. As to claim 14, Landsman teaches the content decoder generates the report signal using a progressNameOfFile API to determine a file name of the markup document currently being preloaded [col. 11 lines 9 – 39; col. 12 lines 15 – 31; col. 26 lines 43 – 49; col. 34 line 66 – col. 35 line 18].

35. As to claim 19, see the rejections of claims 1, 2 and 4.

36. As to claim 20, see the rejection of claim 3.

37. As to claim 21, Landsman teaches the information of the buffer further includes information indicating whether a command to preload the markup document has been successfully received [col. 26 lines 43 – 49].

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38. As to claim 22, Landsman teaches the information of the buffer further includes information indicating whether preloading of the markup document is completed [col. 26 lines 43 – 49].

39. Claims 15 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landsman in view of Silberschatz as applied to claim 2 above, and further in view of Klug et al. (US Pat. 5,996,007; hereinafter Klug).

40. As to claim 15, Landsman fails to specifically teach reporting how much of the document has been preloaded. However, Klug teaches the content decoder generates the report signal using a `progressLengthOfFile` API to determine how much of the markup document currently being preloaded has been preloaded [col. 6 lines 5 – 21].

41. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these references because both teach displaying content, such as advertisements, while other pages are loading, motivating one of ordinary skill in the art to consider combining the features of the two disclosures.

42. As to claim 16, Landsman fails to specifically teach reporting how much has not been preloaded. However, Klug teaches, or at least implies, the content decoder generates the report signal using a `remainLengthOfFile` API to determine how much of

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the markup document currently being preloaded is yet to be preloaded [col. 6 lines 5 – 21; col. 8 lines 6 – 16].

43. As to claim 17, Landsman fails to specifically teach reporting a total size. However, Klug teaches the content decoder generates the report signal using a totalLoadingSize API to determine a total load of the markup document to be preloaded [col. 6 lines 5 – 21].

44. As to claim 18, Landsman fails to specifically teach reporting how much has not been preloaded. However, Klug teaches, or at least implies, the content decoder generates the report signal using a remainLoadingSize API to determine how much of a total load of the markup document is yet to be preloaded [col. 6 lines 5 – 21; col. 8 lines 6 – 16].

45. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landsman in view of Silberschatz and Lumelsky et al. (US 6,463,454 B1; hereinafter Lumelsky).

46. As to claim 23, see the rejections of claims 1 and 2 for limitations not specifically addressed in this rejection. Landsman fails to specifically teach enhanced audio and video. However, Lumelsky teaches the use of enhanced audio and video [col. 4 lines 37 – 55].

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47. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these teachings because Landsman teaches providing multimedia content over the internet and Lumelsky discloses issues related to multimedia over the internet and how to fix some of the problems [col. 4 lines 37 – 55].

48. As to claim 24, Landsman teaches obtaining the markup document, but fails to specifically teach blocked I/O and unblocked I/O. However, Silberschatz teaches using a blocked I/O method in response to obtaining data from a data storage medium [page 418 ¶ 5] and an unblocked I/O method in response to obtaining data from a network [page 418 ¶ 2].

Conclusion

49. The prior art made of record on the P.T.O. 892 that has not been relied upon is considered pertinent to applicant's disclosure. Careful consideration of the cited art is required prior to responding to this Office Action, see 37 C.F.R. 1.111(c).

50. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Price whose telephone number is (571) 272-4196. The examiner can normally be reached on 6:30am - 3:00pm, Monday - Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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